

REMARKS/ARGUMENTS

Favorable consideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1-5 are pending in the application. Claims 1-5 are amended by the present amendment. Support for the amended claims can be found in the original specification, claims and the drawings.<sup>1</sup> No new matter is presented.

In the outstanding Official Action, Claim 1 was rejected under 35 U.S.C. § 102(b) as anticipated by Suzuki (U.S. Patent No. 4,868,811); Claims 2-5 were rejected under 35 U.S.C. § 103(a) as unpatentable over Suzuki; Claims 1-5 were rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement; and the drawings were objected to because of minor informalities.

Claim 1 was rejected under 35 U.S.C. § 112, as failing to be supported by an adequate written description. While Applicant respectfully asserts that the claimed feature cited in the outstanding Official Action is indeed supported by the originally filed specification, Claim 1 is amended, without prejudice or disclaimer, to recite “said plurality of other earth stations are configured to transmit data to said specific earth station over the common channel line without requesting a communication line when said plurality of earth stations determine that the quantity of data to be transmitted is below a predetermined threshold” to more clearly recite this claimed feature.

Support for amended Claim 1 can be found, for example, at page 15, line 1-page 15, line 7 of the originally filed specification. This cited portion of the specification discloses that each earth station is capable of evaluating the quantity of data to be transmitted over the system, and that the earth station demands a communication line from the specific earth station if the quantity of data is above a predetermined threshold, and transmits the data to the

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<sup>1</sup> See e.g., specification at p. 15-16.

specific earth station over the common channel line if the quantity of data is below the predetermined threshold.

The outstanding Official Action further asserts that the specification does not provide adequate written support for “said common signal channel line to the calling earth station to serve as exclusive communication line for said calling earth station”, as recite in amended Claim 5. However, as discussed in the above-noted portion of the specification, the calling earth station and the specific earth station communicate via the common channel line, and the calling earth station does not request a communications line unless the quantity of data to be transmitted is determined to be above a predetermined threshold. Therefore, the common channel line between the calling earth station and the system is the exclusive communication link between the two terminal unless the calling earth station demands a communication line for the transmission of data determined to be above a predetermined quantity.

Therefore, the above-noted features recited in amended Claims 1 and 5 are described in the specification in such a way so as to reasonably convey to one skilled in the art that the inventor had possession of the claimed invention at the time the application was filed. Accordingly, Applicant respectfully requests that the rejection of Claims 1 and 5 under 35 U.S.C. § 112, be withdrawn.

The outstanding Official Action objected to the drawings because “the feature of a different frequency band selection” is not shown in Fig. 2.<sup>2</sup> However, Applicant notes that “different frequency band selection” is not recited in the pending claims. Further, the claims recite the transmission of data between the other earth station and the specific earth station via a “common signal channel line” and a “communication line”. This claimed feature is clearly depicted in Fig. 1, which illustrates the common signal channel line (4/5) and the

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<sup>2</sup> Outstanding Official Action, p. 4.

communication line (6) between the specific earth station and a plurality of other earth stations.<sup>3</sup>

Accordingly, Applicant respectfully submits that the drawings show every feature recited in the claims, and respectfully requests that the objection to Fig. 2 be withdrawn.

Figs. 1-2 and 5-8 were objected to for not reciting elemental names along with the element numbers identifying various features in the figures. In response, replacement drawings sheets are submitted herewith that recite elemental names consistent with the language of the specification in Figs. 1-2 and 5-8.

Accordingly, Applicant respectfully requests that the objections to Figs. 1-2 and 5-8 be withdrawn.

Claim 1 was rejected under 35 U.S.C. § 102(b) as anticipated by Suzuki. Applicants respectfully submit that amended independent Claim 1 states novel features clearly not taught or rendered obvious by the applied references.

Amended Claim 1 relates to a demand assignment multiple access system in which small amounts of data can be transmitted over a common signal channel line without requiring an earth station to demand a communication line for data transmission. The system includes a specific earth station configured to perform line assignment control and a plurality of other earth stations configured to be connected to the specific earth station by a common signal channel line through a communications satellite. The other earth stations communicate larger quantities of data by transmitting a request to the specific earth station for a communication line. However, when the quantity of data to be transmitted is below a predetermined threshold, as determined by the earth station, the earth station transmits data over the common line without requesting a communication line.

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<sup>3</sup> See e.g., specification at p. 11, lines 20-26.

Therefore, the claimed system prevents inefficiency by allowing an earth station to transmit small amounts of data over the common channel line, without demanding a dedicated communication line from the specific earth station. Thus preventing wasteful demands for communication lines when only a small amount of data is to be transmitted.

Turning to the applied reference, Suzuki describes a conventional multiple access communication system for controlling communications between a plurality of units using a plurality of channels, and a common signaling channel for establishing and releasing the communication channels.<sup>4</sup> The outstanding Official Action relies on col. 2, line 55-col. 3, line 23, and Figs. 1-2 of Suzuki in addressing the features recited in Applicant's claims. The cited portion of Suzuki describes that a communications frame is composed using a first and second time slot which are used for a signaling channel and a communication channel, respectively.

However, Applicant respectfully submits that Suzuki fails to teach or suggest all the features recited in amended independent Claim 1. Specifically, Claim 1 recites, *inter alia*, a demand multiple access satellite communications system, wherein

...said plurality of other earth stations are configured to transmit data to said specific earth station ***over the common channel line without requesting a communication line when said plurality of other earth stations determine that the quantity of data to be transmitted is below a predetermined threshold.***

In contrast, Suzuki fails to teach or suggest that the communication units in his system are capable of determining the quantity of data to be transmitted whatsoever, much less that the units are capable of controlling communications based on the comparison of this determined quantity to a threshold. Instead, Suzuki's system allocates a predetermined amount bandwidth to each unit in the form of a requested communication line, and each unit uses the communication line to transmit data regardless of the quantity of data being

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<sup>4</sup> Suzuki, abstract.

transmitted by the unit. However, Suzuki fails to teach or suggest that a plurality of other earth stations are configured to transmit data to said specific earth station *over the common channel line without requesting a communication line when said plurality of other earth stations determine that the quantity of data to be transmitted is below a predetermined threshold*, as recited in amended Claim 1.

Accordingly, Applicant respectfully requests that the rejection of Claim 1 under 35 U.S.C. § 102 be withdrawn. As amended Claims 2-5 depend from amended Claim 1, it is submitted that these claims also patentably define over Suzuki.

Consequently, in view of the present amendment and in light of the foregoing comments, it is respectfully submitted that the invention defined by Claims 1-5 is not distinct and is patentably distinguishing over the applied references. The present application is therefore believed to be in condition for formal allowance and an early and favorable reconsideration of the application is therefore requested.

Customer Number

**22850**

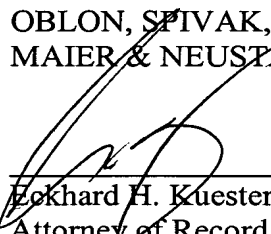
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IN THE DRAWINGS

The attached sheets of drawings include changes to Figs. 1-2 and 5-8. These sheets, which include Figs. 1-2 and 5-8, replace the original sheets including Figs. 1-2 and 5-8.

Attachment: Replacement Sheets